

KN304107

CAPACITIVE SENSORS • NORM SWITCHING DISTANCE

Capacitive proximity switches are contact-free sensors. They detect metallic and non-metallic objects, regardless of whether they move or not. The achievable sensing range of the devices depends on the object material, its dimensions and the response sensitivity, which is set via a potentiometer. The vibration-resistant sensors can be approached laterally or frontally. Capacitive proximity switches are used for presence detection (e.g. sealing detection), positioning (e.g. PET bottles), counting (e.g. plastic caps), level detection (e.g. lubricant) or distance measurements (e.g. thickness measurement) of solid and liquid materials.



MECHANICAL DATA

Active area material of sensor	PA 6.6 (synthetic)
Ambient temperature (MAX)	70 °C
Ambient temperature (MIN)	-25 °C
Cable length	2 m
Degree of protection (IP)	IP67
Housing design	Cylinder, screw-thread
Housing material	PBT
Material of cable sheath	PVC
Mechanical mounting condition for sensor	Non-flush
Number of wires	2
Pressure-proof	No
Sensor length	81 mm
Thread length	40 mm
Thread pitch	1.5 mm
Thread size, metric	30

ELECTRICAL DATA

Cascadable	No
Correction factor (glass)	0.6
Correction factor (oil)	0.5
Correction factor (PVC)	0.5
Correction factor (wood)	0.6
Hysteresis	15 %
Max. output current	300 mA
Min. output current	5 mA
No-load current	15 mA
Rated control supply voltage U_s at AC 50HZ (MAX)	250 V
Rated control supply voltage U_s at AC 50HZ (MIN)	20 V
Setting procedure	Manual adjustment
Suitable for safety functions	No
Supply voltage (MAX)	250 V

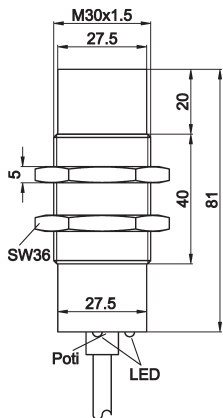
ELECTRICAL DATA

Supply voltage (MIN)	20 V
Switching distance	20 mm
Switching distance (MAX)	20 mm
Switching distance (MIN)	5 mm
Switching frequency	15 Hz
Type of electrical connection	Cable
Type of switching function	Normally open contact
Type of switching output	Two-wire
Voltage drop	10 V
Voltage type	AC
With LED display	Yes
With monitoring function of downstream devices	No

OTHER DATA

Level detection	Yes
-----------------	-----

DIMENSIONAL DRAWING



INSTALLATION



Mounting / Installation may only be carried out by a qualified electrician!

DISPOSAL



SAFETY WARNINGS

Before initial operation, please make sure to follow all safety instructions that may be provided in the product information!

Never use these devices in applications where the safety of a person depends on their functionality.